

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, I. R. TANNEHILL in charge]

NORTH ATLANTIC OCEAN, OCTOBER 1937

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Atmospheric pressure.—The pressure averaged above normal over the northeastern North Atlantic, also over the waters adjacent to Newfoundland and eastern Canada. There was a very small excess around the Azores. On the other hand, near southern Greenland there was a considerable deficiency; the same condition appears over waters adjacent to the Iberian Peninsula and northwestern Africa, owing chiefly to almost continuously low pressure near the southwestern coast of Europe during the final 12 days of the month. The southwestern part of the North Atlantic similarly had pressure somewhat below normal practically all the latter part of the month, and for the entire month averaged slightly below normal, as did the Gulf of Mexico.

The extremes of pressure among vessel reports at hand are 30.68 and 28.40 inches. The higher mark was noted on the American steamship *Solana*, quite near the New Jersey coast, during the forenoon of the 17th; while the lower reading was reported by the German liner *New York*, in the English Channel about noon of the 23d.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, October 1937

Stations	Average pressure	Departure	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Julianehaab, Greenland.....	29.63	-0.11	30.20	24	29.14	4
Reykjavik, Iceland.....	29.71	+ .03	30.51	10	28.85	17
Lerwick, Shetland Islands.....	29.90	+ .11	30.59	4	28.79	24
Valencia, Ireland.....	29.97	+ .06	30.56	4	28.91	25
Lisbon, Portugal.....	29.95	- .07	30.21	17	29.21	26
Madeira.....	29.93	- .06	30.18	3	29.62	26
Horta, Azores.....	30.13	+ .02	30.33	1, 23	29.82	25
Belle Isle, Newfoundland.....	29.92	+ .06	30.42	23	28.92	31
Halifax, Nova Scotia.....	30.06	+ .02	30.56	17	29.28	30
Nantucket.....	30.04	- .01	30.62	17	29.40	29
Hatteras.....	30.05	- .01	30.52	16	29.45	23
Bermuda.....	30.05	- .02	30.24	17	29.78	28
Turks Island.....	29.93	- .02	30.00	16, 17	29.80	26
Key West.....	29.94	- .00	30.05	5	29.76	23
New Orleans.....	30.00	- .03	30.24	15	29.75	2

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

Cyclones and gales.—A moderate number of wind reports of forces 10 or 11 have been received and a single report of force 12. From the 4th to 9th and from the 13th to 17th there was not much storminess, as far as information is available; while after the 20th conditions were mainly settled to westward of the 30th meridian and indeed after the 26th over practically the entire ocean area covered by reports received.

The accompanying table of ocean gales and storms includes two items from the Gulf of Mexico during the opening days of the month, from vessels that met the moderately

severe storm that was described in the September REVIEW. Other items about winds on those days relate mostly to a storm near the 40th meridian in the area traversed by ships on the chief steamship lanes to northwestern Europe.

An important storm was centered near the Carolina coast on the 10th, and moved thence northeastward to Newfoundland on the 12th and onward to near southern Greenland on the 13th. The vessels which reported the storm at its greatest intensity were those to southward of Newfoundland during the afternoon and early evening hours of the 11th. Chart IX presents the situation on the 11th.

The lone report of hurricane strength (force 12) is connected with a storm between the Azores and Bermuda, about the 17th to 19th. The vessel was the British steamship *Ariguani*, eastbound. An unusually severe encounter with the same storm was reported in more detail by the westbound Italian liner *Vulcania*, which rated the storm as the worst met in 10 years. Windows and portholes were smashed and four persons on board suffered injuries. On the whole, but few reports relating to this storm have come in; it was apparently of rather short duration and of small area, and did not advance far. A well-marked HIGH was located to northward at the time, near the chief steamship routes. Chart X presents the condition on the 19th.

About the 22d to 27th a long north-to-south trough of low pressure was over the eastern North Atlantic and the westernmost portions of Europe, and at times some of the centers within the trough were quite intense. Along the south coast of England there was marked damage on the 23d, newspaper reports indicate. The centers of this trough became less energetic by the 27th.

Fog.—In the Grand Banks area and to westward, almost as far as the longitude of Halifax, there was a notable increase of foginess over September, and there was more fog than is normally expected during October. There was, however, little fog there during the first week and between the 15th and the 22d. The foggiest 5°-square for the whole North Atlantic was that between 40° and 45° N., 45° and 50° W., where there were 13 days with fog.

In nearly all other parts of the ocean, save a few small areas near the American coast to southward of Delaware Bay, fog was less frequent than it had been during September, also less frequent than usual in October. In fact, from the 40th meridian eastward to the coasts of Europe there was decidedly little fog reported, and near New England likewise there was comparatively little.

On October 1, two vessels were in collision in upper Delaware Bay because of fog, and a collision that day in New York harbor probably was connected with fog. In neither case was the damage very great. About October 20 a collision resulted from fog north of the Netherlands in the North Sea, and some loss of life is reported to have occurred.